



Modularity Update: Transforming the FA

The Field Artillery is transforming for the future, but our mission endures: provide all-weather, 24/7, responsive, effective fires in support of our ground forces. And in the Global War on Terrorism (GWOT), we execute that mission daily.

I continue to be *impressed* with the job our Field Artillerymen are doing in Operations Iraqi Freedom (OIF) and Enduring Freedom (OEF). They are doing what they do best as the *King of Battle*.

In his interview in this edition, Marine Lieutenant General John Sattler, commander of the coalition and joint forces in urban operations that swept the enemy out of Fallujah, Iraq, in November 2004 praised Marine and Army FA in support of his operations. He said, "We fired more than 6,000 Artillery rounds during the [10-plus day] battle. ... This is how good the Artillery was: the ground warriors were willing to call in artillery rounds 150 meters from themselves."

Our *incredible* Field Artillerymen "keep on, keeping on," firing literally thousands of rounds in Iraq and Afghanistan last year and continuing today. Let me give you just a few examples.

- Task Force 1st Battalion, 148th Field Artillery (TF 1-148 FA), Idaho Army National Guard (IDARNG), fired 1,455 155-mm rounds from its Paladins in OIF last year—illumination, close support and counterfire. This outstanding task force was deployed as part of the 116th Brigade Combat Team (BCT), 42nd Infantry Division, NYARNG, from December 2004 to December 2005. It was headquartered at Forward Operating Base (FOB) Warrior near Kirkuk.

- Soldiers of *Glory's Guns* fired just under 6,000 rounds in the Salah ad Din counterfire campaign in OIF. These talented 1-41 FA Redlegs, part of the 3rd Infantry Division, fired for both the 42nd Division and 101st Airborne Division (Air Assault)—Active Component (AC)

and Reserve Component (RC) working together to secure freedom for Iraq's citizens.

- As of February 2006, all 105-mm and 155-mm artillery assets in Afghanistan had fired 7,000 rounds for operational purposes—as reported in an email by Major General William B. Caldwell IV, Commanding General of the 82nd Airborne Division. Task organized under the 173rd Airborne Brigade, TF *Gun Devil*, 3-319 Airborne FA Regiment (AFAR) (82nd Division), is responsible for arming, manning and fixing all fire support assets in Afghanistan and, in that capacity, works directly with Fires, Combined Joint Task Force 76 (CJTF-76).

But as General Caldwell reported, TF *Gun Devil's* mission in OEF is broader still. TF *Gun Devil* is a ground maneuver task force with its own area of operations (AO) and includes assigned maneuver and Romanian units. The task force has used fires aggressively in its own AO. In fact, TF *Gun Devil* refined a technique to first use indirect fires to interdict enemy movement, fix the enemy formation and then transition to aerial fires (rotary- and fixed-wing). The technique of using indirect fires immediately before employing aerial assets has allowed friendly forces to keep up the momentum as they pursue the fleeing enemy. On several occasions, TF *Gun Devil* has massed fires, both indirect and aerial, on enemy strongpoints in true joint and combined fighting.

General Caldwell concludes his email by saying, "If there is any unit deployed in this GWOT environment that has demonstrated its adaptability and versatility, it is TF *Gun Devil*"

I salute these amazing Field Artillerymen and others just like them firing everyday in support of Coalition Forces in GWOT. I have read numerous accounts of the versatility of Field Artillerymen serving in fires, maneuver and several other roles in Central Command (CENTCOM), and I am convinced the FA leads



the way as "Pentathletes"—transforming not only our organizations and equipment, but also building Soldiers, Marines and leaders who are multi-capable and rapidly adaptable.

Transition to the Modular Force. As the Army embarks on its most sweeping transformation since World War II, we must ensure FA organizations remain ready and relevant today as we "build a bridge" to the future combat system (FCS) force. Unit conversions will not be without significant resourcing challenges, and the solutions may be less than optimal at first. But with Fort Sill and the Training and Doctrine Command (TRADOC) working together with Forces Command (FORSCOM) and the Department of the Army (DA), we will meet these challenges.

The Army leadership recognized at the outset of transformation that new designs would require modification but had to maintain solid, fundamental baselines. The guidance for the design teams was to provide organizations at the 80 percent solution level that could be adjusted and required little or no growth in personnel.

Our FA design team focused on transferring those functions the division artillery (Div Arty) performed to the new fire support cells (FSCs) in the BCT and maneuver battalion headquarters. ("FSC" is the doctrinal term replacing the "fires and effects cell," or "FEC," as of *Field Manual (Interim) 5-0.1 The Operations Process*, dated February 2006.) Other major changes were adding a fire support coordinator (FSCOORD)

lieutenant colonel to the BCT and consolidating the fire support teams (FISTs) into a platoon in the maneuver battalion. These changes allow the FSCOORD to oversee the training and certification of fire supporters who are so critical to the BCT's operations.

At the division level, we have asked that the FSCOORD in the division FCS be upgraded from O-5 to O-6. This will give the FSCOORD a peer relationship to work with the division's BCT commanders, again, helping to ensure Field Artillerymen are trained to standard and combat ready across the division.

The Army leadership selected the 3rd Infantry Division to be the first to convert to the modular force. One part of its conversion was the deactivation of the 3rd Div Arty in 2003, making its subordinate battalions fires battalions organic to the BCTs. The 3rd Infantry Division just redeployed from Iraq—we look forward to reports of lessons learned from these new fires battalions' experiences in GWOT.

In 2004, the 4th Infantry Div Arty at Fort Hood, Texas, converted into the Army's first fires brigade, the 4th Fires Brigade. The brigade transformed simultaneously with its preparation for deployment and currently is in Iraq. The 4th Fires Brigade's lessons learned in GWOT will help us refine our fires brigade design.

There is inherent goodness for the FA in the modular designs. The FA AC is increasing by seven battalions. This growth will enable us to reward more of our outstanding leaders with chances

to command as lieutenant colonels and serve as battalion command sergeants major.

With this increase in AC battalions, we have reopened the M119 production line to provide enough of the towed 105-mm howitzers for the infantry BCTs (IBCTs). These new M119s also will replace many of the aged M102 howitzers in FA ARNG units.

We are continuing to transform FA units into the modular designs. To date, 18 FA battalions in the AC and six in the ARNG have reorganized into fires battalions.

2006 will continue to bring modular changes. This year, an additional 19 AC and 23 ARNG FA battalions will transform into fires battalions, and the 75th and 214th FA Brigades in the AC and 142nd FA Brigade in the ARNG will convert to the fires brigade design. DA G3 approved the modified tables of organization and equipment (MTOEs) for these units on 8 February; I expect them to be published in March. The remainder of our FA force will transition to modular designs by the end of FY08.

Mechanisms for Change. We currently have six force design updates (FDUs) that will affect the FA community. (An FDU, basically, is a request for change.) Most of the FDUs are at TRADOC for inclusion in the Modular Force Review.

- We have requested the addition of a counterfire operations section (COS) to the fires battalions in IBCTs and heavy BCTs (HBCTs), which is awaiting Mod Force Review. This FDU would add six Soldiers in a COS to analyze data from

multiple sensors, develop targets and then integrate the targets into the fires battalion's fire plan.

- The most far-reaching FDU would affect our Stryker BCTs (SBCTs), which also is awaiting Mod Force Review. This FDU would add nine Soldiers to the SBCT fires battalion operations and S2 sections, improving their abilities to conduct 24-hour operations. It also would add a second fire direction center (FDC) and an additional platoon leader and platoon sergeant to each firing battery, allowing it to conduct platoon operations. The latter change is extremely important as our SBCT fires battalions transition to a 3x6 configuration (three batteries, each with six howitzers) as they field the 155-mm M777A1 lightweight towed howitzer with its digital fire control system (DFCS) in coming years.

- Another important FDU is the coding of the BCT deputy commanding officer (DCO) as an O-2A Officer Generalist. This FDU is in response to an issue raised by the 28th Infantry Division, PAARNG. Coding the BCT DCO as O-2A would allow an FA officer to serve in this critical position in any type of BCT. This FDU currently is being staffed within TRA-DOC; if approved, it will go directly to DA for staffing Army-wide.

- Other FDUs include adding four FA tactical data systems operators to the division FSC, awaiting Mod Force Review; changing the rank of the division FSCOORD from lieutenant colonel to colonel (as already mentioned), which has FORSCOM and TRADOC concurrence and is being staffed in the DA G3; and adding a 40A Space Officer to the battlefield coordination detachment (BCD), awaiting Mod Force Review.

I will keep you posted on the resolution of these FDUs.

Equipment Transformation. The Army vision calls for the rapid infusion of enhanced capabilities as well as technologies from FCS development into the force. An experimental BCT (EBCT) will be activated in 2008 as a means to accelerate this infusion of capabilities and technologies. The EBCT will validate FCS capabilities for infusion into the BCTs as FCS "spin outs."

We also are working to ensure new equipment is fielded rapidly to Soldiers, especially those deployed in support of GWOT. The Profiler meteorological system and the M707 Knight with its fire support sensor system (FS³) were fielded to the 3rd Infantry Division for its OIF deployment. The FS³ provides



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Soldiers with better surveillance capabilities and target resolution at greatly increased ranges.

In an earlier column, I talked about fielding the *incredible* 155-mm Excalibur unitary precision-guided munition in CENTCOM. Excalibur's testing is on track, and the projectile is performing very well. In February, the testing team shot Excalibur with a live warhead at a 20-by-20-meter reinforced structure at a distance of nearly 19 kilometers. Impressively, the round impacted four meters from the center of the target.

Excalibur will undergo several critical tests in March which, if its excellent performance continues, will keep it on a fast track for fielding in theater. Its limited user test (LUT) currently is scheduled to begin in late July with the goal of fielding Excalibur in the First Quarter of FY07.

Reports about the guided multiple-launch rocket system (GMLRS) unitary rocket's effectiveness in urban operations in Iraq are *awesome*. A total of 30 GMLRS unitary rockets have been fired in OIF on five different targets. Two of the targets were in a dense urban area in a large city. Those two targets were destroyed, killing a number of insurgents with very limited collateral damage to the surrounding structures. Each rocket hit its intended target with less than a four-meter circular error probable (CEP).

The new GMLRS unitary rocket and existing Army tactical missile system (ATACMS) Block 1A quick-reaction unitary (QRU) missile, two surface-to-surface precision-guided munitions, now give the commander options for all-weather first-round effects from 15 to 270 kilometers in ongoing operations.

We have fielded Counter Rocket, Artillery, and Mortar (C-RAM) "sense and warn" capabilities to several

FOBs within the CENTCOM area of responsibility (AOR). C-RAM provides Soldiers, Sailors, Airmen, Marines and civilians early warning of indirect fire attacks. This "system of systems" has brought together Army, Air Force and Marine Corps sensors and fused their data into a common operational picture (COP), allowing the commander to clear fires quickly to respond to enemy indirect fire attacks. A full sense, warn and intercept package has been fielded to one FOB in Iraq, providing an active protection system for key locations on the FOB.

Along with in-theater efforts, the C-RAM system of systems has been integrated into training at the National Training Center, Fort Irwin, California, starting with Rotation 06-04. In a short time, units have been able to master the C-RAM systems, employing them in counterinsurgency operations using both lethal and nonlethal counterstrike assets—a definite advantage for our units preparing to deploy in GWOT.

Doctrine. Significant changes in operational and organizational concepts require changes to our doctrine and tactics, techniques and procedures (TTPs). Currently, *FM 3-09.41 TTP for Fires and Effects for SBCT Operations* and *FMI 3-09.42 TTP for the Modular Fires Battalion* have been approved. We are working on *FM 3-09.23 TTP for the Modular Fires Battalion* and *FM 3-09.42 TTP for Fire Support for the BCT*. Readers can find links to these manuals on the Fires Knowledge Network (FKN) home page, part of Army Knowledge Online (AKO). We soon will begin work on *FM 3-09.24 TTP for the Fires Brigade*.

Conclusion. A primary means for us to stay abreast of transformation issues is the modularity video-conference (Mod VTC) conducted the second

Wednesday of each month. The Mod VTC is a forum for units and agencies across the Army to exchange ideas, input and track issues, and update information about the issues and emerging or planned solutions.

To date, we have worked 64 issues and resolved 50 of them. Information on these Mod VTCs, to include slide packets and minutes, is posted on FKN. I encourage all leaders affected by modular issues to participate in these monthly VTCs and other Field Artillerymen to tap into the FKN information about the transforming FA.

Finally, Fort Sill is continuing to execute the Base Realignment and Closure (BRAC) Commission directives, transitioning to the Fires Center of Excellence (CoE) (vice the NetFires Center of Excellence, as previously reported). The Air Defense Artillery (ADA) Center and School and FA Center and School are well into planning for the "virtual stand up" of the Fires CoE on 1 June and the eventual physical relocation of ADA to Fort Sill. In those efforts, the leaders of Fort Sill and Fort Bliss have been working closely in monthly VTCs or face-to-face meetings.

I recently returned from a "Home-on-Home" conference at Fort Bliss for both transition teams. I am delighted to report that they worked as *one team* to solve problems and implement the BRAC directives in a spirit of absolute cooperation—I *applaud* them. The focus of my May-June column will be our plans for transitioning to the Fires CoE.

Change can be daunting, and we have a lot of change ongoing in the US military, Army and FA today. However, our highly skilled, committed, versatile and adaptable FA Soldiers and leaders continue to meet all challenges. Because of you, the Field Artillery remains the *King of Battle!*

FA-ADA Fires Seminar: 31 May – 1 June

The 2006 Fires Seminar will be held at the Reimer Conference Center in the Field Artillery School, Fort Sill, Oklahoma, from 31 May to 1 June. It will focus on two subject areas: establishing the Fires Center of Excellence (CoE) with the Field Artillery and Air Defense Artillery Schools at Fort Sill (including a ceremony to initiate the "virtual" Fires CoE) and the role of fires in the

contemporary operational environment (including urban and counterinsurgency operations).

Invitees will be both Active and Reserve Components Army FA and ADA and Marine FA senior leaders and brigade-level and higher commanders and nominative command sergeants major; plus other Army leaders; fires representatives from the joint community; and

allied representatives. Invitations will be sent via email in March.

As more information becomes available, it will be posted on the Fires Seminar portion of the Fort Sill Home Page: <http://sill-www.army.mil>, including an email address.

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